

**ANALYSIS REPORT**

Prepared by:

Eurofins Lancaster Laboratories Environmental  
2425 New Holland Pike  
Lancaster, PA 17601

Prepared for:

Integral Consulting Inc.  
Suite 190  
285 Century Place  
Louisville CO 80027

Report Date: August 25, 2017

**Project: Solvay**Account #: 20003  
Group Number: 1839194  
State of Sample Origin: NJ

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>. To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To Solvay  
Electronic Copy To Solvay  
Electronic Copy To Integral Consulting Inc.  
Electronic Copy To Integral Consulting Inc.Attn: Mitch Gertz  
Attn: Mark Christensen  
Attn: Erin Palko  
Attn: Craig Hutchings

Respectfully Submitted,

Bonnie Stadelmann  
Senior Project Manager

(312) 590-3133

**SAMPLE INFORMATION**

<u>Client Sample Description</u>	<u>Collection Information</u>	<u>ELLE#</u>
V915 Grab Water	07/31/2017 16:00	9161911
Field Blank Grab Water	07/31/2017 16:00	9161912
V915 Grab Water	08/09/2017 14:00	9161913
Field Blank Grab Water	08/09/2017 14:00	9161914

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Sample Description: V915 Grab Water  
Solvay

ELLE Sample # WW 9161911  
ELLE Group # 1839194  
Account # 20003

Project Name: Solvay

Collected: 07/31/2017 16:00 by NK

Integral Consulting Inc.

Submitted: 08/17/2017 09:45

Suite 190

Reported: 08/25/2017 13:30

285 Century Place

Louisville CO 80027

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
<b>Misc. Organics</b>		<b>EPA 537 Version 1.1 Modified</b>	<b>ng/l</b>	<b>ng/l</b>	<b>ng/l</b>	
10954	Perfluorobutanesulfonate	375-73-5	N.D.	0.8	3	1
10954	Perfluorodecanoic acid	335-76-2	7	0.5	2	1
10954	Perfluorododecanoic acid	307-55-1	N.D.	0.5	2	1
10954	Perfluoroheptanoic acid	375-85-9	22	0.5	2	1
10954	Perfluorohexanesulfonate	355-46-4	N.D.	1	3	1
10954	Perfluorohexanoic acid	307-24-4	10	0.6	2	1
10954	Perfluorononanoic acid	375-95-1	1,300	6	20	10
10954	Perfluoro-octanesulfonate	1763-23-1	4 J	2	6	1
10954	Perfluorooctanoic acid	335-67-1	220	0.6	2	1
10954	Perfluorotetradecanoic acid	376-06-7	N.D.	0.5	2	1
10954	Perfluorotridecanoic acid	72629-94-8	N.D.	0.5	2	1
10954	Perfluoroundecanoic acid	2058-94-8	23	1	3	1

The recovery for the sample injection internal standard I13C3-PFBA and extraction standard E13C3-PFBS is outside the QC acceptance limits. The recovery for the internal standard and extraction standard is also outside the QC acceptance limits in the associated matrix spike, indicating a matrix effect.

The holding time was not met. The sample was submitted to the laboratory outside of the holding time.

## Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10954	PFAS in Water by LC/MS/MS	EPA 537 Version 1.1 Modified	1	17230014	08/21/2017 19:32	Jason W Knight	1
10954	PFAS in Water by LC/MS/MS	EPA 537 Version 1.1 Modified	1	17230014	08/22/2017 20:26	Devon M Whooley	10
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	17230014	08/18/2017 11:20	Pamela Rothharpt	1

\*=This limit was used in the evaluation of the final result

Sample Description: Field Blank Grab Water  
Solvay

ELLE Sample # WW 9161912  
ELLE Group # 1839194  
Account # 20003

Project Name: Solvay

Collected: 07/31/2017 16:00 by NK

Integral Consulting Inc.

Submitted: 08/17/2017 09:45

Suite 190

Reported: 08/25/2017 13:30

285 Century Place

Louisville CO 80027

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
<b>Misc. Organics</b>		<b>EPA 537 Version 1.1 Modified</b>	<b>ng/l</b>	<b>ng/l</b>	<b>ng/l</b>	
10954	Perfluorobutanesulfonate	375-73-5	N.D.	0.8	3	1
10954	Perfluorodecanoic acid	335-76-2	N.D.	0.5	2	1
10954	Perfluorododecanoic acid	307-55-1	N.D.	0.5	2	1
10954	Perfluoroheptanoic acid	375-85-9	N.D.	0.5	2	1
10954	Perfluorohexanesulfonate	355-46-4	N.D.	1	3	1
10954	Perfluorohexanoic acid	307-24-4	N.D.	0.6	2	1
10954	Perfluorononanoic acid	375-95-1	N.D.	0.6	2	1
10954	Perfluoro-octanesulfonate	1763-23-1	N.D.	2	6	1
10954	Perfluorooctanoic acid	335-67-1	N.D.	0.6	2	1
10954	Perfluorotetradecanoic acid	376-06-7	N.D.	0.5	2	1
10954	Perfluorotridecanoic acid	72629-94-8	N.D.	0.5	2	1
10954	Perfluoroundecanoic acid	2058-94-8	N.D.	1	3	1

The holding time was not met. The sample was submitted to the laboratory outside of the holding time.

## Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10954	PFAS in Water by LC/MS/MS	EPA 537 Version 1.1 Modified	1	17230014	08/21/2017 19:52	Jason W Knight	1
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	17230014	08/18/2017 11:20	Pamela Rothharpt	1

\*=This limit was used in the evaluation of the final result

Sample Description: V915 Grab Water  
Solvay

ELLE Sample # WW 9161913  
ELLE Group # 1839194  
Account # 20003

Project Name: Solvay

Collected: 08/09/2017 14:00 by MC

Integral Consulting Inc.

Submitted: 08/17/2017 09:45

Suite 190

Reported: 08/25/2017 13:30

285 Century Place

Louisville CO 80027

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
<b>Misc. Organics</b>		<b>EPA 537 Version 1.1 Modified</b>	<b>ng/l</b>	<b>ng/l</b>	<b>ng/l</b>	
10954	Perfluorobutanesulfonate	375-73-5	N.D.	0.8	3	1
10954	Perfluorodecanoic acid	335-76-2	36	0.5	2	1
10954	Perfluorododecanoic acid	307-55-1	0.7 J	0.5	2	1
10954	Perfluoroheptanoic acid	375-85-9	54	0.5	2	1
10954	Perfluorohexanesulfonate	355-46-4	1 J	1	3	1
10954	Perfluorohexanoic acid	307-24-4	23	0.6	2	1
10954	Perfluorononanoic acid	375-95-1	4,700	6	20	10
10954	Perfluoro-octanesulfonate	1763-23-1	5 J	2	6	1
10954	Perfluorooctanoic acid	335-67-1	600	0.6	2	1
10954	Perfluorotetradecanoic acid	376-06-7	N.D.	0.5	2	1
10954	Perfluorotridecanoic acid	72629-94-8	0.8 J	0.5	2	1
10954	Perfluoroundecanoic acid	2058-94-8	120	1	3	1

## Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10954	PFAS in Water by LC/MS/MS	EPA 537 Version 1.1 Modified	1	17230014	08/21/2017 20:13	Jason W Knight	1
10954	PFAS in Water by LC/MS/MS	EPA 537 Version 1.1 Modified	1	17230014	08/22/2017 20:46	Devon M Whooley	10
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	17230014	08/18/2017 11:20	Pamela Rothharpt	1

\*=This limit was used in the evaluation of the final result

Sample Description: Field Blank Grab Water  
Solvay

ELLE Sample # WW 9161914  
ELLE Group # 1839194  
Account # 20003

Project Name: Solvay

Collected: 08/09/2017 14:00 by MC

Integral Consulting Inc.

Submitted: 08/17/2017 09:45

Suite 190

Reported: 08/25/2017 13:30

285 Century Place

Louisville CO 80027

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
<b>Misc. Organics</b>		<b>EPA 537 Version 1.1 Modified</b>	<b>ng/l</b>	<b>ng/l</b>	<b>ng/l</b>	
10954	Perfluorobutanesulfonate	375-73-5	N.D.	0.8	3	1
10954	Perfluorodecanoic acid	335-76-2	N.D.	0.5	2	1
10954	Perfluorododecanoic acid	307-55-1	N.D.	0.5	2	1
10954	Perfluoroheptanoic acid	375-85-9	N.D.	0.5	2	1
10954	Perfluorohexanesulfonate	355-46-4	N.D.	1	3	1
10954	Perfluorohexanoic acid	307-24-4	N.D.	0.6	2	1
10954	Perfluorononanoic acid	375-95-1	N.D.	0.6	2	1
10954	Perfluoro-octanesulfonate	1763-23-1	N.D.	2	6	1
10954	Perfluorooctanoic acid	335-67-1	N.D.	0.6	2	1
10954	Perfluorotetradecanoic acid	376-06-7	N.D.	0.5	2	1
10954	Perfluorotridecanoic acid	72629-94-8	N.D.	0.5	2	1
10954	Perfluoroundecanoic acid	2058-94-8	N.D.	1	3	1

## Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10954	PFAS in Water by LC/MS/MS	EPA 537 Version 1.1 Modified	1	17230014	08/21/2017 20:34	Jason W Knight	1
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	17230014	08/18/2017 11:20	Pamela Rothharpt	1

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: Integral Consulting Inc.  
Reported: 08/25/2017 13:30

Group Number: 1839194

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

### Method Blank

Analysis Name	Result	MDL**	LOQ
	ng/l	ng/l	ng/l
Batch number: 17230014	Sample number(s): 9161911-9161914		
Perfluorobutanesulfonate	N.D.	0.8	3
Perfluorodecanoic acid	N.D.	0.5	2
Perfluorododecanoic acid	N.D.	0.5	2
Perfluoroheptanoic acid	N.D.	0.5	2
Perfluorohexanesulfonate	N.D.	1	3
Perfluorohexanoic acid	N.D.	0.6	2
Perfluorononanoic acid	N.D.	0.6	2
Perfluoro-octanesulfonate	N.D.	2	6
Perfluorooctanoic acid	N.D.	0.6	2
Perfluorotetradecanoic acid	N.D.	0.5	2
Perfluorotridecanoic acid	N.D.	0.5	2
Perfluoroundecanoic acid	N.D.	1	3

### LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	ng/l	ng/l	ng/l	ng/l					
Batch number: 17230014	Sample number(s): 9161911-9161914								
Perfluorobutanesulfonate	176.8	158.29	176.8	165.65	90	94	70-130	5	30
Perfluorodecanoic acid	200	190.1	200	191.58	95	96	70-130	1	30
Perfluorododecanoic acid	200	185.78	200	187.17	93	94	70-130	1	30
Perfluoroheptanoic acid	200	209.39	200	193.22	105	97	70-130	8	30
Perfluorohexanesulfonate	189.2	184.05	189.2	191.38	97	101	70-130	4	30
Perfluorohexanoic acid	200	207.13	200	185.42	104	93	70-130	11	30
Perfluorononanoic acid	200	189.81	200	197.73	95	99	70-130	4	30
Perfluoro-octanesulfonate	191.2	191.62	191.2	178.24	100	93	70-130	7	30
Perfluorooctanoic acid	200	190.31	200	184.41	95	92	70-130	3	30
Perfluorotetradecanoic acid	200	195.37	200	183.02	98	92	70-130	7	30
Perfluorotridecanoic acid	200	217.65	200	214.73	109	107	70-130	1	30
Perfluoroundecanoic acid	200	209.24	200	185.99	105	93	70-130	12	30

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

## Quality Control Summary

Client Name: Integral Consulting Inc.  
Reported: 08/25/2017 13:30

Group Number: 1839194

### MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ng/l	MS Spike Added ng/l	MS Conc ng/l	MSD Spike Added ng/l	MSD Conc ng/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 17230014	Sample number(s): 9161911-9161914 UNSPK: 9161911									
Perfluorobutanesulfonate	N.D.	177.17	174.39			98		70-130		
Perfluorodecanoic acid	7.21	200.42	204.44			98		70-130		
Perfluorododecanoic acid	N.D.	200.42	196.73			98		70-130		
Perfluoroheptanoic acid	21.99	200.42	213.13			95		70-130		
Perfluorohexanesulfonate	N.D.	189.6	198.51			105		70-130		
Perfluorohexanoic acid	10.29	200.42	201.96			96		70-130		
Perfluorononanoic acid	1283.48	200.42	1300.26			8 (2)		70-130		
Perfluoro-octanesulfonate	4.48	191.6	188.55			96		70-130		
Perfluorooctanoic acid	219.11	200.42	395.25			88		70-130		
Perfluorotetradecanoic acid	N.D.	200.42	201.35			100		70-130		
Perfluorotridecanoic acid	N.D.	200.42	222.38			111		70-130		
Perfluoroundecanoic acid	22.55	200.42	219.96			99		70-130		

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report. For dual column analyses, the surrogate (at least one surrogate for multi-surrogate tests) must be within the acceptance limits on at least one of the two columns.

Analysis Name: PFAS in Water by LC/MS/MS  
Batch number: 17230014

	13C3-PFBS	13C5-PFHxA	13C3-PFHxS	13C4-PFHpA	13C8-PFOA	13C8-PFOS
9161911	188*	69	78	73	73	86
9161912	84	79	76	79	76	69
9161913	121	67	72	78	69	78
9161914	92	77	85	78	84	77
Blank	93	76	79	81	84	88
LCS	79	71	78	73	70	75
LCSD	85	77	74	72	73	88
MS	170*	64	74	71	71	85
Limits:	26-148	31-128	34-126	35-126	43-112	43-115
	13C9-PFNA	13C6-PFDA	13C7-PFUnDA	13C2-PFDoDA	13C2-PFTeDA	
9161911	80	76	83	84	81	
9161912	70	76	75	78	75	
9161913	61	72	73	80	80	
9161914	79	85	82	85	76	
Blank	104	88	88	87	86	
LCS	82	82	82	85	83	

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.



## Quality Control Summary

Client Name: Integral Consulting Inc.  
Reported: 08/25/2017 13:30

Group Number: 1839194

### Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report. For dual column analyses, the surrogate (at least one surrogate for multi-surrogate tests) must be within the acceptance limits on at least one of the two columns.

Analysis Name: PFAS in Water by LC/MS/MS  
Batch number: 17230014

	13C9-PFNA	13C6-PFDA	13C7-PFUnDA	13C2-PFDoDA	13C2-PFTeDA
LCSD	82	78	76	77	81
MS	83	73	75	89	80
Limits:	32-134	40-115	30-128	28-127	26-119

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

# Environmental Analysis Request/Chain of Custody



Lancaster Laboratories  
Environmental

For Eurofins Lancaster Laboratories Environmental use only

Acct. # 20003 Group # 1839194 Sample # 9161911-14

COC # 532867

Client Information				Matrix				Analysis Requested												For Lab Use Only			
Client: <u>Solway</u>		Acct. #:		<input type="checkbox"/> Tissue <input type="checkbox"/> Ground <input type="checkbox"/> Surface <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input checked="" type="checkbox"/> Surface		Total # of Containers		Preservation Codes												FSC: <u>0</u>	Preservation Codes H=HCl      T=Thiosulfate N=HNO <sub>3</sub> B=NaOH S=H <sub>2</sub> SO <sub>4</sub> O=Other		
Project Name/ID:		PWSID #:																		SCR#: <u>210729</u>			
Project Manager:		P.O. #:		<input type="checkbox"/> Sediment <input type="checkbox"/> Water <input type="checkbox"/> Other:																Remarks			
Sampler: <u>M. Christensen on 8/9/17</u> <u>N. Klein on 7/31/17</u>		Quote #:																					
State where samples were collected: <u>NJ</u>		For Compliance: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																					
Sample Identification		Collected		Grab	Composite	Soil	Water	Other:	Total # of Containers														
		Date	Time																				
<u>V915</u>		<u>7/31/17</u>	<u>1600</u>	<u>X</u>			<u>X</u>		<u>2</u>	<u>X</u>													
<u>V915 Field Blank</u>		<u>7/31/17</u>	<u>1600</u>	<u>X</u>			<u>X</u>		<u>1</u>	<u>X</u>													
		<u>7/31/17</u>	<u>1600</u>	<u>X</u>																			
<u>V915</u>		<u>8/9/17</u>	<u>1400</u>	<u>X</u>			<u>X</u>		<u>2</u>	<u>X</u>													
<u>Field Blank</u>		<u>8/9/17</u>	<u>1400</u>	<u>X</u>			<u>X</u>		<u>1</u>	<u>X</u>													
		<u>8/9/17</u>	<u>1400</u>	<u>X</u>																			

  

Turnaround Time (TAT) Requested (please circle) Standard _____ Rush <u>(circled)</u> (Rush TAT is subject to laboratory approval and surcharge.)				Relinquished by <u>Bottle stopper</u> Date <u>8/14/17</u> Time <u>0700</u>				Received by <u>M. Klein</u> Date <u>8/14/17</u> Time <u>0700</u>							
Date results are needed: <u>8/25/17</u> For the <u>7/31/17</u> sample				Relinquished by <u>M. Klein</u> Date <u>8/14/17</u> Time <u>1400</u>				Received by <u>GUARD HOUSE</u> Date <u>8/14/17</u> Time <u>1400</u>							
E-mail address: <u>mark.christensen@solway.com</u>				Relinquished by <u>M. Klein</u> Date <u>8/14/17</u> Time <u>1400</u>				Received by _____ Date _____ Time _____							
Relinquished by _____ Date _____ Time _____				Received by _____ Date _____ Time _____				Relinquished by _____ Date _____ Time _____				Received by <u>WB</u> Date <u>8/17/17</u> Time <u>9:45</u>			

  

Data Package Options (circle if required) Type I (EPA Level 3 Equivalent/non-CLP)      Type VI (Raw Data Only) Type III (Reduced non-CLP)      NJ DKQP      TX TRRP-13 NYSDEC Category A or B      MA MCP      CT RCP				EDD Required? Yes <u>No</u> If yes, format: _____				Relinquished by Commercial Carrier: UPS _____ FedEx <u>X</u> Other _____			
Site-Specific QC (MS/MSD/Dup)? Yes <u>No</u> (If yes, indicate QC sample and submit triplicate sample volume.)				Temperature upon receipt <u>3.4</u> °C							

# Sample Administration Receipt Documentation Log

Doc Log ID: 191830



Group Number(s): 1839194

Client: Solvay

## Delivery and Receipt Information

Delivery Method:	<u>Fed Ex</u>	Arrival Timestamp:	<u>08/17/2017 9:45</u>
Number of Packages:	<u>1</u>	Number of Projects:	<u>1</u>
State/Province of Origin:	<u>NJ</u>		

## Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace $\geq$ 6mm:	N/A
Samples Chilled:	Yes	Total Trip Blank Qty:	0
Paperwork Enclosed:	Yes	Air Quality Samples Present:	No
Samples Intact:	Yes		
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

*Unpacked by Wyatt Shiffler (12792) at 11:00 on 08/17/2017*

## Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

<u>Cooler #</u>	<u>Thermometer ID</u>	<u>Corrected Temp</u>	<u>Therm. Type</u>	<u>Ice Type</u>	<u>Ice Present?</u>	<u>Ice Container</u>	<u>Elevated Temp?</u>
1	DT131	3.4	DT	Wet	N	Bagged	N

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

<b>BMQL</b>	Below Minimum Quantitation Level	<b>mg</b>	milligram(s)
<b>C</b>	degrees Celsius	<b>mL</b>	milliliter(s)
<b>cfu</b>	colony forming units	<b>MPN</b>	Most Probable Number
<b>CP Units</b>	cobalt-chloroplatinate units	<b>N.D.</b>	non-detect
<b>F</b>	degrees Fahrenheit	<b>ng</b>	nanogram(s)
<b>g</b>	gram(s)	<b>NTU</b>	nephelometric turbidity units
<b>IU</b>	International Units	<b>pg/L</b>	picogram/liter
<b>kg</b>	kilogram(s)	<b>RL</b>	Reporting Limit
<b>L</b>	liter(s)	<b>TNTC</b>	Too Numerous To Count
<b>lb.</b>	pound(s)	<b>µg</b>	microgram(s)
<b>m3</b>	cubic meter(s)	<b>µL</b>	microliter(s)
<b>meq</b>	milliequivalents	<b>umhos/cm</b>	micromhos/cm
<b>&lt;</b>	less than		
<b>&gt;</b>	greater than		
<b>ppm</b>	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
<b>ppb</b>	parts per billion		
<b>Dry weight basis</b>	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

**Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.**

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

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# Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
J (or G, I, X)	Estimated value $\geq$ the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column $>40\%$ . The lower result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column $>100\%$ . The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.  
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.